United States Department of Agriculture

Economic Research Service

Division

Natural Resources and Environment

## AREI UPDATES

Updates on Agricultural Resources and Environmental Indicators

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## **Agricultural Cash Rents in 1995**

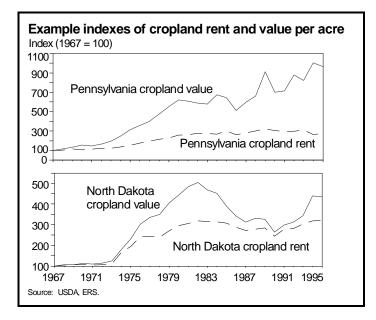
- Cash rents for cropland were generally higher in 1995 than in 1994, while those for pasture were generally lower.
- Cash rents per acre were highest for irrigated cropland in California and Florida.

Because cash rents reflect the income-earning capacity of the land, they vary widely across the country. Cropland cash rents tend to be highest in States and regions where higher-valued crops are grown. During 1995, average cash rents were highest for irrigated land in California and Florida, at \$189.60 and \$183.50 per acre, respectively (table 2). These States both produce large shares of high-value specialty crops, vegetables, fruits, and nuts. Cropland suitable for corn and soybean production in the Midwest also commands high cash rents. The highest rents for nonirrigated cropland in 1995 were reported in Illinois (\$99.70 per acre) and Iowa (\$99.60 per acre).

Average cash rents for cropland were higher in most States for the 1995 crop year than in 1994. This pattern was roughly similar for both irrigated and nonirrigated cropland. An upward pattern was most evident in the Northeast, Northern Plains, and Pacific regions, where all States, except New York, reported higher cropland rents. Other regions presented a mixed picture, showing no change or lower average cash rents in some States.

During 1995, average cash rents for pasture varied from a high of \$39.30 per acre in California, to a low of \$1.80 per acre in New Mexico (table 1). Average cash rents for pasture were almost uniformly lower than in 1994 in the Northern Plains, Appalachia, Delta, and Southern Plains. For the Corn Belt, Mountain, and Southeast regions, some States reported higher and some lower 1995 cash rents compared with 1994.

Over time, changing conditions within farm real estate markets can alter the economic relationship between cash rents and the value of rented farmland. As an illustration, the clear divergence between cash rents and cropland value in Pennsylvania (see figure) can likely be attributed to increased urbanization. As demand for



nonagricultural use increases, farmland values rise relatively faster than cash rents, which are a measure of the return from agricultural use of the land. In contrast, North Dakota exhibits a pattern of a State whose farmland values are determined mainly from use in agricultural production.

This report initiates publication of cash rent estimates from the June Agricultural Survey (JAS) (see box on back page). Previously, information on cash rents came from the Agricultural Land Values Survey (ALVS), discontinued in 1994. JAS was chosen as the new survey instrument because its area-frame design, probability basis, and personal interview format should more accurately portray each State's farmland market.

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## **About AREI UPDATES**

**AREI UPDATES** is a periodic series that supplements and updates information in **Agricultural Resources and Environmental Indicators** (**AREI**), USDA, ERS, AH-705, Dec. 1994. **UPDATES** report recent data from surveys of farm operators and others knowledgeable about changing agricultural resource use and conditions, with only minimal interpretation or analysis. Please contact the individual listed at the end of the text for additional information about the data in this **UPDATE**. If you would like to be added to the mailing list or have other questions about **AREI UPDATES** or **AREI**, contact Richard Magleby, (202) 219-0436. [rmagleby@econ.ag.gov]

Table 1—Pasture rented for cash: average gross cash rent per acre and rent as a percent of value, selected States, 1991-95

			Rent pe	er acre		Rent to value <sup>1</sup>						
State	ALVS <sup>2</sup> 1991	ALVS 1992	ALVS 1993	ALVS 1994	JAS <sup>3</sup> 1994	JAS 1995	ALVS 1991	ALVS 1992	ALVS 1993	ALVS 1994	JAS 1994	JAS 1995
Northeast:			Doll	ars					Perce	nt		
New England	na	na	na	na	20.60	20.90	na	na	na	na	1.1	1.1
New York	16.90 *	19.90 *	17.00	17.60 *	14.70 *	14.50 *	5.2	4.2	2.2	2.8	2.3	2.7
New Jersey Pennsylvania	21.60	21.80	27.10 25.40	20.70	20.70	29.80	1.7	1.5	0.5 2.0	1.1	2.1	1.9
Maryland	33.80	31.90	31.50	32.40	33.50	*	2.5	2.1	2.5	1.3	1.4	*
Lake States:												
Michigan	21.70	19.60	21.50	22.10	*	*	4.8	4.2	4.2	3.5	*	*
Wisconsin	23.30	25.60	24.90	22.50	25.50	31.40	6.5	7.6	7.2	6.6	4.3	5.8
Minnesota	22.90	18.60	19.60	22.30	16.20	16.50	8.8	6.3	5.7	7.5	5.3	5.1
Corn Belt:	00.50	00.50	05.00	05.50	*	*		4.0	0.4		*	*
Ohio	30.50	26.50	25.60	25.50	*	*	4.5	4.3	3.4	3.3	*	*
Indiana Illinois	33.40 33.50	35.00 34.90	35.90 31.80	32.90 34.60	31.00	27.65	5.4 6.0	6.1 5.6	5.7 5.2	4.5 5.2	5.6	4.0
lowa	35.40	33.60	36.10	36.40	26.35	28.05	7.7	7.3	7.0	7.2	5.5	6.2
Missouri	24.10	23.70	22.60	24.70	18.50	16.40	6.2	5.4	4.7	5.1	2.6	2.7
Northern Plains:												
North Dakota	8.80	9.20	9.10	9.70	8.30	8.00	6.6	7.1	6.8	6.7	5.9	4.9
South Dakota	8.60	8.20	7.80	8.90	9.70	8.50	8.0	7.4	6.3	6.8	6.0	5.5
Nebraska	12.40	11.80	11.30	11.10	10.20	9.20	7.9	7.4	6.9	5.9	6.1	5.4
Kansas	11.60	12.00	12.80	12.80	12.20	11.70	5.1	5.0	5.1	4.8	3.7	4.1
Appalachia:												
Virginia	21.20	22.60	20.20	19.40	14.80	10.50	2.6	2.2	1.9	1.7	1.2	0.8
West Virginia North Carolina	11.10 18.70	14.70 21.30	16.70 23.20	17.60 23.00	17.00 16.90	14.00 13.90	2.3 2.3	1.9 2.1	1.9 1.8	3.3 1.9	3.0 0.9	2.2 0.8
Kentucky	25.20	25.90	24.50	26.20	*	13.90	4.3	3.3	3.3	3.3	*	*
Tennessee	25.20	23.50	25.80	31.90	15.20	14.30	4.6	2.9	3.3	4.4	0.8	0.7
Southeast:												
South Carolina	17.50	15.30	16.40	18.80	*	16.11	2.7	2.2	1.8	2.2	*	1.7
Georgia	19.90	19.70	21.10	23.00	20.00	19.20	3.3	2.6	2.2	2.3	1.4	1.4
Florida	22.50	21.40	21.00	17.00	17.00	19.50	1.7	0.8	0.8	1.2	.7	.8
Alabama	18.20	18.80	19.40	19.10	13.10	12.50	3.4	3.2	3.6	3.1	2.4	2.0
Delta States:	45.00	4400	45.00	44.00	45.00	40.00		0.4	0.4		0.5	
Mississippi	15.60	14.90	15.00	14.90	15.90	13.00	3.7	3.4	3.1 4.9	2.8	2.5	2.0 1.2
Arkansas Louisiana	15.50 17.70	18.60 17.20	19.90 14.50	18.00 15.60	20.90 13.00	15.60 12.60	3.3 3.0	4.0 2.7	4.9 2.1	3.5 2.3	2.0 0.9	0.8
Southern Plains:												
Oklahoma	10.50	10.20	9.40	9.60	9.40	9.20	3.4	3.4	3.0	3.1	3.2	3.1
Texas	9.00	6.90	7.00	7.30	5.00	4.80	1.7	1.8	1.6	1.5	1.2	1.4
Mountain:												
Montana	5.10	6.60	8.10	6.20	5.50	5.10	5.0	5.5	5.8	4.7	4.7	3.9
Idaho	17.20	26.50	19.10	23.10	28.20	29.30	5.2	6.1	6.3	5.7	4.9	4.5
Wyoming	3.50	3.60	4.20	5.80	3.10	3.50	3.4	3.6	3.8	3.9	2.5	2.9
New Mexico Utah	na 20.20	na 25.70	na 23.00	na 20.90	1.60 16.30	1.80 13.70	na 4.3	na 3.5	na 3.2	na 1.9	1.5 0.9	1.5 0.7
	20.20	20.70	20.00	20.00	10.00	10.70	7.0	5.0	5.2	1.0	0.0	0.7
Pacific: Washington	*	21.90	29.80	25.10	*	*	*	4.0	4.2	3.1	*	*
Oregon	*	22.60	25.40	21.50	*	*	*	4.0	6.0	6.8	*	*
	*				26.90	39.30	*				1.6	2.5
California		37.90	34.20	44.90	26.90	39.30		2.2	1.8	1.6	1.6	

<sup>\* =</sup> Insufficient information. na = data not available.

¹Cash rent as a percent of per acre value of rented pasture.

²ALVS is "Agricultural Land Values Survey."

³JAS is "June Agricultural Survey."

Table 2—Cropland rented for cash: average gross cash rent per acre and rent as a percent of value, selected States, 1991-95

		-		Rent to value <sup>1</sup>									
State and land type	e²	ALVS <sup>3</sup> 1991	ALVS 1992	ALVS 1993	ALVS 1994	JAS⁴ 1994	JAS 1995	ALVS 1991	ALVS 1992	ALVS 1993	ALVS 1994	JAS 1994	JAS 1995
<u> </u>													
Northeast:				Percent									
New Engla	and	na	na	na	na	31.50	35.20	na	na	na	na	.7	.7
New York		33.90	36.20	34.90	38.20	25.10	25.10	5.0	4.5	3.9	3.8	2.4	2.2
New Jerse	•	66.50	52.00	50.60	71.10	42.90	45.40 38.80	0.4	0.5	0.8	1.3 1.5	0.4 1.4	0.6 1.5
Pennsylva Delaware	Illa	42.10 59.60	42.40 62.30	44.10 57.90	41.90 59.80	37.70 54.90	61.10	2.2 3.6	1.8 3.3	2.0 2.6	2.8	2.4	2.5
Maryland		53.30	*	55.40	60.80	41.40	44.70	3.0	*	2.3	2.2	1.3	1.6
Lake States:													
Michigan		45.50	47.40	45.60	49.00	48.00	49.70	6.0	6.2	5.7	5.5	4.8	4.9
Wisconsin Minnesota	l	52.30 63.30	51.40 62.30	52.50 64.20	51.20 61.90	48.70 66.00	46.20 70.10	7.1 7.4	7.3 7.6	6.9 7.6	6.8 7.9	5.6 6.8	4.9 6.5
Corn Belt:													
Ohio		69.10	70.20	68.50	70.50	64.50	67.10	5.8	5.6	5.5	4.7	3.8	3.5
Indiana		86.70	85.70	88.30	90.40	83.40	88.40	6.8	7.5	6.8	6.3	5.7	5.6
Illinois		100.90	103.30	102.90	107.30	99.50	99.70	6.6	6.5	6.3	5.5	4.2	4.9
Iowa Missouri	-All cropland	100.80 62.20	104.60 58.20	108.00 64.10	107.00 64.80	98.60	99.60	8.2 9.3	8.0 8.0	7.9 8.9	7.4 8.6	6.5	6.3
Missouri	-Nonirrigated	na	na	na	na	na 55.10	na 51.10	na	na	na	na	na 4.2	na 4.2
Northern Plain	s:												
N. Dakota		28.70	29.10	31.30	31.90	32.90	33.10	9.0	8.7	8.5	8.2	7.0	7.1
S. Dakota	-All cropland	37.40	30.40	30.50	32.20	na	na	8.0	8.3	8.0	8.2	na	na
Nobrooko	<ul><li>-Nonirrigated</li><li>-Nonirrigated</li></ul>	na 58.30	na 49.60	na 50.30	na 50.30	30.00 56.70	30.20 57.20	na 8.6	na 8.6	na 8.6	na 8.3	6.6 8.2	6.9 7.7
Nebraska	-Irrigated	98.90	102.80	102.20	106.80	108.40	111.10	8.9	9.5	9.3	9.3	8.5	7.7 8.4
Kansas	-Nonirrigated	32.50	31.90	32.80	34.70	32.60	35.50	7.7	7.2	7.4	7.3	6.5	5.9
	-Irrigated	60.60	62.70	65.10	72.50	*	*	8.7	9.5	9.3	10.1	*	*
Appalachia:													
Virginia		34.50	34.40	33.80	37.40	35.80	35.70	2.8	2.1	2.4	2.4	2.2	1.9
West Virgi North Card		29.50 34.60	30.40 37.70	30.10 41.00	36.90 38.10	31.00 32.50	30.00 33.60	4.6 3.0	3.4 2.8	3.5 2.8	4.3 2.5	2.7 2.2	2.3 2.0
Kentucky	ліпа	52.70	52.60	55.30	59.00	49.10	52.80	6.6	5.4	5.2	5.7	4.4	3.8
Tennessee	е	51.20	48.80	50.20	49.50	46.70	43.00	6.0	5.1	4.8	5.8	3.6	3.1
Southeast:													
S. Carolina		22.30	21.70	22.50	23.40	23.90	23.50	3.0	2.5	2.8	2.6	2.6	2.5
Georgia-	-All cropland -Nonirrigated	27.90	29.70	30.50	32.00	na 28.70	na 32.90	3.9	3.5	3.2	3.5	na 3.9	na 4.2
	-Irrigated	na na	na na	na na	na na	56.10	60.80	na na	na na	na na	na na	5.3	6.1
Florida-	-All cropland	126.10	101.50	95.70	73.10	na	na	3.6	3.0	3.5	1.9	na	na
	-Nonirrigated	na	na	na	na	20.80	22.50	na	na	na	na	2.0	2.8
	-Irrigated	na	na	na	na	136.30	183.50	na _	na	na	na	1.8	1.7
Alabama		28.60	28.10	30.70	36.50	31.60	36.20	4.7	4.1	4.3	4.8	2.8	3.4
Delta States:		07.00	40.00	00.00	44.00				0.7	0.4			
Mississipp	i-All cropland -Nonirrigated	37.90	40.80	39.60	44.00	na 44.30	na 41.60	6.0	6.7	6.4	6.7	na 5.7	na 5.5
	-Irrigated	na na	na na	na na	na na	59.90	70.00	na na	na na	na na	na na	6.6	7.3
Arkansas	-All cropland	55.50	48.00	50.10	50.70	na	na na	6.6	7.3	7.2	6.3	na	na
	-Nonirrigated	na	na	na	na	46.90	48.40	na	na	na	na	6.5	6.8
	-Irrigated	na	na	na	na	68.10	58.70	na	na	na	na	6.8	6.4
Louisiana-		49.50	48.30	46.80	48.30	na 47.00	na 55.00	7.0	6.1	5.6	6.0	na	na
	-Nonirrigated -Irrigated	na na	na na	na na	na na	47.90 78.90	55.30 77.60	na na	na na	na na	na na	5.9 8.9	5.7 8.2
Southern Plains:													
	-Nonirrigated	25.60	26.10	26.20	25.20	25.50	25.10	5.7	5.6	5.5	5.1	4.5	4.0
	-Irrigated	42.10	39.10	39.10	41.70	*	*	7.1	5.9	6.4	6.9	*	*
Texas	-Nonirrigated	20.30	20.00	20.60	20.20	17.60	17.00	3.1	3.3	3.5	3.2	2.6	2.1
	-Irrigated	42.50	45.30	49.40	44.90	58.50	53.80	4.9	7.3	7.6	6.3	5.7	5.6

<sup>-</sup> Continued -

Table 2—Cropland rented for cash: average gross cash rent per acre and rent as a percent of value, selected States, 1991-95--continued

			Rent per acre						Rent to value <sup>1</sup>							
State and land type <sup>2</sup>		ALVS³ 1991	ALVS 1992	ALVS 1993	ALVS 1994	JAS⁴ 1994	JAS 1995	ALVS 1991	ALVS 1992	ALVS 1993	ALVS 1994	JAS 1994	JAS 1995			
			Dollars							Percent						
Mounta	in:															
	Montana	<ul> <li>Nonirrigated</li> </ul>	18.40	19.80	21.00	24.10	15.20	15.30	7.3	8.3	7.8	8.4	5.1	5.1		
		-Irrigated	43.60	50.60	54.80	49.70	*	*	6.6	5.0	5.5	7.3	*	*		
	Idaho	<ul> <li>Nonirrigated</li> </ul>	41.30	33.90	34.30	47.80	*	*	7.4	5.6	6.4	7.6	*	*		
		-Irrigated	92.00	114.30	100.50	126.60	99.50	112.30	8.9	9.9	7.1	8.9	6.9	7.4		
	Wyoming	<ul> <li>Nonirrigated</li> </ul>	10.20	9.60	13.40	16.10	*	*	6.6	5.7	6.7	6.3	*	*		
		-Irrigated	40.30	49.40	54.00	51.20	*	*	8.3	8.7	8.2	7.7	*	*		
	New Mexico	-Irrigated	70.40	87.70	80.40	88.90	77.70	88.00	3.9	2.6	2.5	1.8	4.2	4.6		
	Arizona	-All land	na	na	na	na	80.60	87.40	na	na	na	na	3.0	2.8		
		-Irrigated	144.20	128.10	136.70	150.10	na	na	3.4	3.8	3.6	3.0	na	na		
	Utah	-Nonirrigated	26.50	30.50	26.30	28.20	*	*	6.3	3.8	3.3	3.6	*	*		
		-Irrigated	60.30	57.60	52.90	54.00	51.40	50.90	4.3	3.4	3.0	2.5	1.5	1.4		
	Nevada	-Irrigated	87.70	92.70	89.10	81.70	*	*	5.1	4.8	6.2	3.2	*	*		
Pacific:																
,	Washington	-Nonirrigated	53.30	49.80	53.40	55.90	69.50	70.80	6.1	5.5	5.4	6.7	4.1	4.6		
	•	-Irrigated	117.40	113.10	124.20	133.20	127.90	137.80	6.3	5.7	6.3	6.1	6.5	7.1		
(	Oregon	-Nonirrigated	53.10	58.20	55.50	61.90	59.10	66.00	4.7	6.0	5.6	4.2	4.2	4.6		
	Ŭ	-Irrigated	96.00	106.70	124.70	135.90	125.50	130.00	6.2	6.1	7.8	7.4	5.2	5.8		
(	California	-Irrigated	167.60	179.60	191.50	223.00	176.00	189.60	4.8	3.4	3.6	4.4	4.4	4.6		

<sup>\* =</sup> Insufficient information. na = data not available.

## **June Agricultural Survey**

The JAS is an area-frame survey that divides the United States into "segments" representative of land uses across the Nation. Segments are selected to represent approximately 1 percent of the total land area in the contiguous 48 States, with 20 percent of the samples replaced each year. Within these segments, enumerators identify "tracts," which represent a particular farm operator's acreage. Farm operators then provide estimates of cash rent per acre for the rented farmland within their tract. The randomly selected segments of land, with 80 percent resurveyed each year, are expected to enhance the statistical reliability of USDA estimates of farmland cash rents and values. Cash rental acres were identified in 17,565 tracts (35 percent of total agricultural tracts) during the 1995 survey.

The JAS replaces the Agricultural Land Values Survey (ALVS). A 1-year overlap of the two surveys provides a comparison of estimates for 1994, and permits estimates of change from 1994 to 1995 to be based on the same survey (JAS). For most States the two estimates are similar, but for a few States noticeable differences exist. The discontinuity due to a change in survey instrument can be bridged by comparing the cash rent indicators from successive years on each survey. For instance, users interested in differences between the cash rental rates for 1993 and 1994 can examine the 1993 and 1994 estimates from the ALVS. Similarly, users interested in differences between the cash rental rates in 1994 and 1995 can examine the respective data from the JAS. Several factors may have contributed to the differences in estimates. First, farmer responses to JAS questions pertained to specific land, while those to the ALVS pertained to a nonspecific "locality." Second, in contrast to the area-frame design of JAS, ALVS was based on a list-frame. Third, estimates calculated from JAS have a probability basis, whereas estimates from ALVS were simple averages of total responses. Other possible factors were that most responses to the ALVS were obtained through telephone contacts made in January, while the JAS was personally enumerated in June.

<sup>&</sup>lt;sup>1</sup>Cash rent as a percent of per acre value of rented cropland. <sup>2</sup> Unless otherwise specified as irrigated or nonirrigated, data are for all cropland. <sup>3</sup> ALVS is "Agricultural Land Values Survey." <sup>4</sup>JAS is "June Agricultural Survey."